Updated Avian Influenza Information

Since Avian Influenza has received a good bit of attention in the media as of late, I thought that it would be a good idea to update readers on the current status of the strain that is affecting the U.S.

Since late 2014 to this writing, there have been 223 detections of the current strain (H5N2) of Highly Pathogenic Avian Influenza (HPAI) in the U.S. This has affected over 48 million birds and cases have been confirmed in California, Oregon, Washington, Idaho, Montana, North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Arkansas, Wisconsin and Indiana. A current map of the confirmed cases can be found via the USDA/APHIS website.

**WHAT IS AVIAN INFLUENZA?**

Avian influenza is a Type A influenza virus. These Type A viruses occur naturally in wild birds, particularly aquatic birds and shorebirds. These infections rarely cause signs or symptoms in wild birds. However, these viruses are, typically, highly contagious and can cause morbidity and mortality in domesticated birds species such as chickens, ducks and turkeys.

The two main types of avian influenza are Low Pathogenic Avian Influenza (LPAI) and Highly Pathogenic Avian Influenza (HPAI). As the name(s) suggest, LPAI typically causes low morbidity and mortality in the affected birds while HPAI causes high morbidity and mortality. It is important to note that natural mutations within the virus structure can cause LPAI to change into HPAI, so all infections with the virus are of some concern.

**HUMANS AND AVIAN INFLUENZA**

While scientists cannot say with certainty that humans cannot contract the virus from birds, the odds of this happening are very low. In cases where there has been transmission of the AI virus from bird to human, there was a high level of physical contact and interaction with sick and infected birds or their bodily fluids. It is important to note that the currently identified strain (H5N2) has not been shown to infect humans at all. Previous human infections occurred in other countries and were from the H5N1 form of the influenza virus.

**FOOD AND AVIAN INFLUENZA**

Proper cooking of poultry and eggs will kill the Avian Influenza virus. Proper cooking temperature for poultry products is 165°F. You should also remember that commercial poultry flocks are constantly monitored for the disease and positive flocks are not allowed into the food chain.

Additional sources of information about Avian Influenza are listed below:

- [AI in Birds (CDC)](https://www.cdc.gov/flu/pandemies/avian-influenza.htm)
- [AI in Humans (CDC)](https://www.cdc.gov/flu/pandemies/avian-human-flu.htm)
- [USDA Avian Influenza Web Page](https://www.usda.gov/sfs/animal/diseases/nlpav/)
- [USDA/APHIS Current Confirmed AI Cases in the US](https://www.usda.gov/sfs/animal/diseases/nlpav/)
- [FDACS Avian Influenza Web Page](https://www.fdacs.com/)
- [FDACS Avian Influenza Detection Monitoring and Prevention](https://www.fdacs.com/)

Please send comments or questions to biker@ifas.ufl.edu

Archives of past issues can be found [here](https://www.ifas.ufl.edu/)

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UF/IFAS Small Farms Poultry Web Page

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Enjoy Summer Grilling Safely

Now that summer is ‘officially’ here, and with the Independence Day celebrations coming up, the familiar smells of grilling will permeate the air during the evenings and on the weekends. However, cooking outdoors and serving food at a family picnic require that you take an extra measure of care to prevent foodborne illness and to have the best tasting grilled food for your table. By following the guidelines listed below, you can make sure that your cookouts are both safe and fun for the whole family.

- Make sure to keep meat at 40°F or less (normal refrigeration temperature) until immediately before grilling.
- Do not thaw meats at room temperature. It may take a little extra planning, but thaw your meat in the refrigerator.
- Do not use leftover marinade as the base for sauces. The marinade may have picked up bacteria from the raw meat and unless it is heated to a high temperature these bacteria may still be present and cause illness.
- Make sure to wash your hands, utensils, and surfaces well and often to prevent cross-contamination.
- Serve the meat as soon as you can after it is cooked. The maximum time that it should be held without refrigeration is two (2) hours.
- All poultry meat (chicken, turkey, duck, etc.) should be cooked to an internal temperature of 165°F.
- All ground meat (other than poultry) should be cooked to an internal temperature of 160°F.
- Steaks, chops, other whole muscle cuts, fish and shellfish should be cooked to an internal temperature of 145°F.
- Remember that excess smoke and flare-ups are caused by fat from the meat. To avoid these, use meats that are generally low in fat, or trim the excess.
- Aluminum foil can be used to cover the grill surface to prevent flare-ups and scorching. Poking a few holes in the foil will let juices drip without the worry of flare-ups.
- Make sure to refrigerate any leftovers as soon as you can. Do not reuse food that has been left out for more than two (2) hours. Most grilled foods can be stored at refrigeration temperatures for two (2) days after cooking.
- Sanitizing your utensils and work area is a good idea. Mix 1.5 to 2 teaspoons of household bleach per quart of water to make a sanitizing solution.

For additional information on food safety, please visit the UF/IFAS EDIS food safety website at https://edis.ifas.ufl.edu/topic_food_safety or visit the U.S. Department of Health and Human Services food safety website at http://www.foodsafety.gov/index.html.
Safe Food Handling

Safe food handling isn’t just important while you are grilling. You should practice safe food handling techniques all year. The following guidelines are complimentary to those for grilling and should be used anytime you are preparing food. These practices are adapted from the Partnership for Food Safety Education. Additional information can be found here.

CLEAN

- Wash hands with warm water and soap for at least 20 seconds before and after handling food and after using the restroom.
- Wash cutting boards, dishes, utensils, and counter tops with hot, soapy water after preparing each food item before you move on to the next.
- If you use cloth towels to clean kitchen surfaces, make sure to wash them frequently in the hot cycle of the clothes washer.
- Rinse fresh fruits and vegetables under running tap water.

SEPARATE

- Separate raw meat, poultry, seafood, and eggs from other foods in your shopping cart, grocery bags, and refrigerator. This will decrease the chance of cross-contamination.
- Use a separate cutting board for fresh produce and raw meats.
- Never place cooked food on a plate that previously held raw meats.

COOK

- Use a food thermometer to determine the temperature of cooked foods.
- Cook fish, roasts, and steaks to a minimum of 145°F.
- All poultry should be cooked to 165°F.
- Cook ground meats to 160°F.
- Cook eggs until the yolk and white are firm. Do not use recipes where eggs remain raw or only partially cooked.
- Bring sauces, soups, and gravies to a boil when reheating.
- Remember that color is not a good indicator of temperature.

CHILL

- Never let raw meat, poultry, eggs, cooked food, or cut fresh fruits sit at room temperature for more than two (2) hours before refrigeration.
- Never defrost at room temperature. Use the refrigerator, cold water, or the microwave.
- Always marinate foods in the refrigerator.
- Divide large amounts of leftovers into smaller containers for quicker chilling in the refrigerator.

Get your kids involved in food safety. Visit the FIGHT BAC for KIDS website here.

According to the USDA and CDC, 90% of Salmonella cases are attributed to sources other than chicken.

Source
Poultry Q & A

Q: What is the average lifespan of a chicken?
A: Commercial laying hens are typically kept for up to 3 years. There have been many reports of backyard chickens that have lived up to 10 years.

Q: Why do hens stop laying eggs?
A: Otherwise healthy hens will stop laying eggs either because they have been in production for a long time and are entering a molt or if they are not properly stimulated by light.

Q: I’ve heard that there are techniques such as changing incubation temperature that will increase the number of females (males) that hatch out of a given clutch of eggs. Is this true?
A: There are no tricks to change the number of male or female offspring that will hatch from a clutch. Although a specific clutch may have more females than males (or vice versa), over time the sex ratio for males to females will be 50:50.

Q: Are hormones used in the commercial production of poultry meat and eggs?
A: No. Hormones are not fed to or administered to commercial poultry. In fact, this is against the law and has been for over 60 years. The rapid growth rates, high egg production, and good feed efficiencies are the result of traditional genetic selection, good nutrition, and advanced animal husbandry practices.

Q: Is there a difference in the nutritional quality of brown-shelled and white-shelled eggs?
A: No, there is no difference. The color of the shell is determined by the breed of hen that lays the egg. Hens that lay brown eggs are typically larger than those that lay white-shelled eggs, so the eggs may be a bit larger. Brown egg layers are also not usually as efficient in feed conversion as white egg layers. This results in more feed being fed to brown egg layers, thus increasing the price of these eggs.

Q: Why is the albumen (white) sometimes cloudy or greenish/yellowish in color?
A: Cloudiness in the albumen is caused by carbon dioxide in the albumen that has not had time to escape from the pores in the shell. There is nothing wrong with these eggs and the cloudiness indicates that the egg as very fresh. If the albumen has a greenish/yellowish color to it, this indicates that presence of riboflavin (Vitamin B2). There eggs are safe to consume.